

WHAT IS CLAIMED IS:

1. A lateral edge position detector for a recording medium including lateral edges extending in a first direction of feeding, said lateral edge position detector comprising:

a movable lateral edge contact mechanism for being pressed by one of said lateral edges, to move away;

an encoding panel for shifting together with said lateral edge contact mechanism, said encoding panel including plural slits arranged in a shifting direction at a regular pitch;

an encoding sensor for optically detecting said slits moving past a detection region thereof, to output at least an A-phase pulse and a B-phase pulse that is deviated from said A-phase pulse by a half of said pitch;

a counter for determining a direction of being up or down according to a phase difference between said A and B-phase pulses, and for counting said A and B-phase pulses, wherein a counted number of said counter represents a position of said one lateral edge in a width direction crosswise to said first direction.

2. A lateral edge position detector as defined in claim 1, wherein said lateral edge contact mechanism is movable in said width direction.

25 3. A lateral edge position detector as defined in claim 2, wherein said encoding panel is movable in a region of a surface of said recording medium.

4. A lateral edge position detector as defined in claim 1, further comprising a bias mechanism for biasing 30 said encoding panel toward an initial position.

5. A lateral edge position detector as defined in
claim 4, wherein said encoding panel has a closed portion
without said slits, and said closed portion is positioned
in said detection region of said encoding sensor when said
5 encoding panel is set in said initial position.

6. A lateral edge position detector as defined in
claim 5, wherein said lateral edge contact mechanism
includes an edge receiving portion for extending with an
inclination with reference to said first direction, and for
10 being pressed by a corner of a front end of said recording
medium to move in said width direction against said bias
mechanism, thereafter an end of said edge receiving portion
being kept in contact with said one lateral edge.

7. A lateral edge position detector as defined in
15 claim 6, further comprising a reinforcer overlaid on said
edge receiving portion.

8. A lateral edge position detector as defined in
claim 6, wherein said edge receiving portion has two block
ridges for receiving respectively upper and lower surfaces
20 of said recording medium, for regulation in a direction of
said recording medium surfaces.

9. A lateral edge position detector as defined in
claim 6, wherein said lateral edge contact mechanism is
formed with said encoding panel, and rotatable about an
25 axis extending in said first direction.

10. A lateral edge position detector as defined in
claim 6, wherein said lateral edge contact mechanism and
said encoding panel are movable respectively in said width
direction, further comprising a transmission mechanism for
30 connection of said lateral edge contact mechanism and said
encoding panel.

11. A lateral edge position detector as defined in claim 10, wherein said transmission mechanism is rotational.

12. A printer including a printhead for image recording to a recording medium, comprising:

a pair of feeder rollers for moving said recording medium in a first direction, said recording medium including lateral edges extending in said first direction;

10 a movable lateral edge contact mechanism for being pressed by one of said lateral edges, to move away;

an encoding panel for shifting together with said lateral edge contact mechanism, said encoding panel including plural slits arranged in a shifting direction at a regular pitch;

15 an encoding sensor for optically detecting said slits moving past a detection region thereof, to output at least an A-phase pulse and a B-phase pulse that is deviated from said A-phase pulse by a half of said pitch;

20 a counter for determining a direction of being up or down according to a phase difference between said A and B-phase pulses, and for counting said A and B-phase pulses, wherein a counted number of said counter represents a position of said one lateral edge in a width direction crosswise to said first direction; and

25 a controller for controlling said printhead according to said counted number of said counter, to suppress recording an image in a portion of said recording medium outside said one lateral edge.

30 13. A printer as defined in claim 12, wherein said printhead is a thermal head having plural heating elements, and said controller keeps end region heating elements

turned off, said end region heating elements being included in said plural heating elements in an array, and disposed outside said one lateral edge.

14. A printer as defined in claim 13, further comprising a bias mechanism for biasing said encoding panel toward an initial position.

15. A printer as defined in claim 14, wherein said encoding panel has a closed portion without said slits, and said closed portion is positioned in said detection region 10 of said encoding sensor when said encoding panel is set in said initial position.

16. A printer as defined in claim 15, wherein said lateral edge contact mechanism includes an edge receiving portion for extending with an inclination with reference to 15 said first direction, and for being pressed by a corner of a front end of said recording medium to move in said width direction against said bias mechanism, thereafter an end of said edge receiving portion being kept in contact with said one lateral edge.